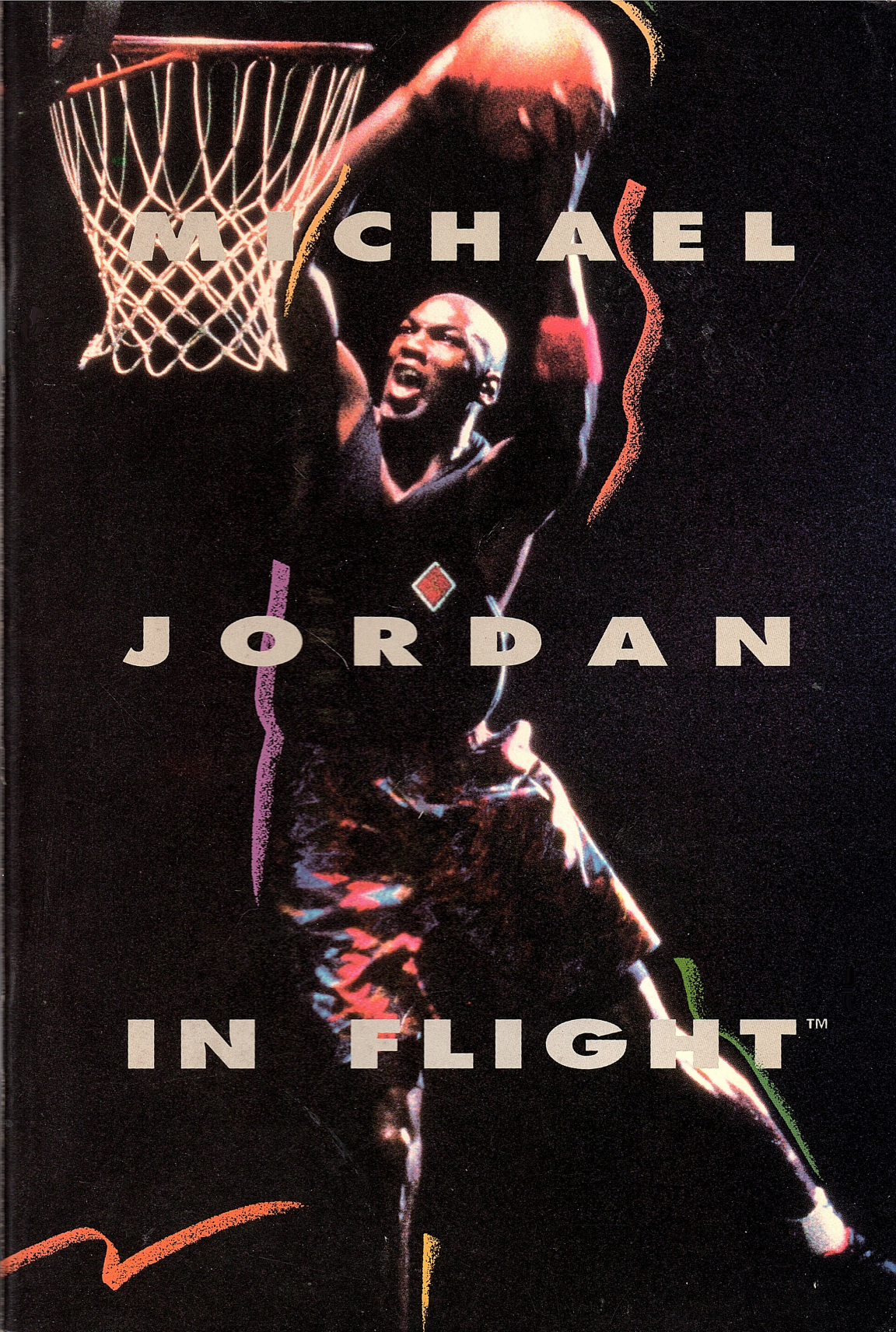
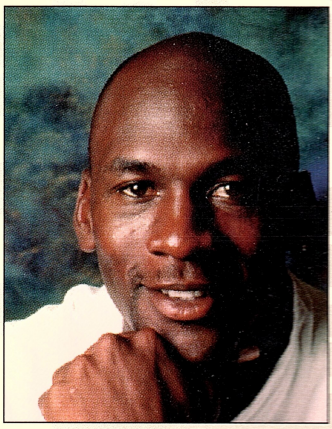

MICHAEL
JORDAN
IN FLIGHT™

JORDAN PLAYS CLEAN



While it's certainly true that Michael Jordan commits an occasional foul, his behavior on the court is considered to be exemplary by the officials and the other players. When he makes a steal, people shake their heads not in shame, but in admiration. Not only is Jordan a great player, but he's a good person. In keeping with the example set by one of America's most deserving heroes, we hope you will respect the law and not steal this product by making and distributing illegal copies.

Developers of computer simulations use the money they make from the sale of their products to stay in business. If potential customers steal their goods and services, prices must be raised to compensate for the losses. Soon legitimate customers can't afford to pay the higher prices, and everyone loses.

Jordan In Flight was produced for your enjoyment through the combined efforts of a dedicated team at Electronic Arts. We—designers, artists, programmers, and other committed professionals—depend on you to pay a fair price for our software so we can afford to create and develop new and better games. We encourage you to play and enjoy Jordan In Flight with your friends, but please don't make illegal copies of the program for them.

Electronic Arts supports the industry's effort to fight against the illegal copying of personal computer software. Thank you for helping us in our effort to control software costs by eliminating software theft. And please remember, copying computer software for any other reason than to make a backup is a violation of federal law. Individuals who make illegal copies of this software are subject to civil and criminal penalties.

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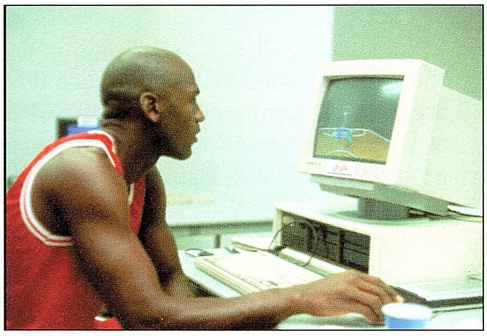
INSTALLING *JORDAN IN FLIGHT*

The following section provides necessary information for installing and getting maximum performance out of *Jordan In Flight.* Make sure you read this information carefully before installing the program.



MINIMUM HARDWARE REQUIREMENTS

16 Mhz IBM 386 or compatible

EMS 4.0 driver

2 Megabytes RAM of which 560K is free from lower 640K, and 1024K free EMS memory

Microsoft compatible mouse or Joystick

Hard disk drive with 3.5 Megabytes free space

1.2 Mb 5.25" floppy drive or 1.44 Mb 3.5" floppy drive

MS DOS 3.3 or greater

VGA video card with 512K RAM

RECOMMENDED HARDWARE

33 Mhz IBM 486 or compatible

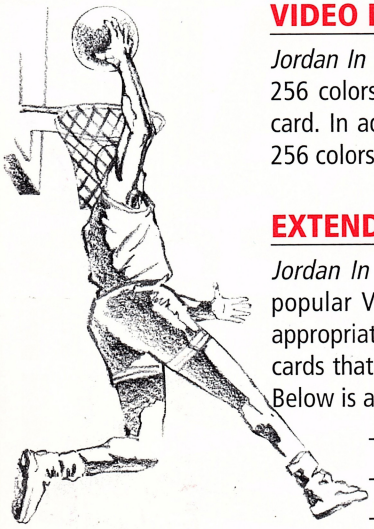
4 Megabytes RAM

Extended VGA card with 1 Megabyte RAM (see supported list on p. 4)

SoundBlaster™ sound card

MS DOS 5.0

Microsoft compatible mouse



VIDEO MODE SUPPORT

Jordan In Flight is designed to run in Standard VGA mode (320 x 200 x 256 colors) on any VGA video card with at least 512K of RAM on the card. In addition, *Jordan In Flight* provides Extended VGA (640 x 400 x 256 colors) support for many popular VGA video cards.

EXTENDED VGA MODE SUPPORT (640 X 400 X 256 COLORS)

Jordan In Flight provides Extended VGA mode video drivers for many popular VGA cards. Use the Config program (see p.6) to choose the appropriate driver for your system. There are separate video drivers for cards that have 512K RAM and those that have 1 Mb RAM on the card. Below is a list of the Extended VGA cards supported by *Jordan In Flight*.

- BOCA Super X SVGAX1
- Cardinal VGA 700
- Diamond SpeedStar
- Diamond SpeedStar 24X
- Genoa 7900 VGA
- Orchid Pro Designer II
- STB PowerGraph VGA
- Toshiba T4400C
- Video 7 VRAM II Ergo

Notes:

1. Some accelerated SVGA video cards designed to enhance the operation of Microsoft Windows will not work with *Jordan In Flight* in Extended VGA mode. **Examples of video cards that fall into this category are the ATI Graphics Ultra and the Orchid Fahrenheit 1280.** *Jordan In Flight* WILL work perfectly with these cards in Standard VGA mode.
2. The speed performance of the game in Extended VGA mode will be greater when using a video card with 1 Mb RAM as opposed to 512K RAM.
3. The Highlight Film and Instant Replay features of the game are not supported in the 512K RAM Extended VGA drivers. Although these features are not disabled, users may experience graphics anomalies on those two screens.
4. If you're using a Western Digital or Paradise Graphics Extended VGA card, see page 48 for more information.

SOUND CARD SUPPORT

Jordan In Flight provides sound support for the following sound cards:

- Adlib
- PC built-in speaker
- Pro Audio Spectrum 16
- Roland MT-32
- SoundBlaster
- SoundBlaster Pro

If you have a SoundBlaster or Pro Audio Spectrum sound card, you will hear digitized sound effects and Michael Jordan's digitized speech. These features are not available with other sound cards.

EMS DRIVER

Jordan In Flight requires an expanded memory driver (EMS 4.0 or later) to be installed and configured to provide at least 1024K (1,048,576 bytes) of free EMS memory. *Jordan In Flight* has been tested with the following EMS drivers:

- 386MAX version 6
- Compaq EMS
- EMM386 (provided with DOS 5.0)
- QEMM version 6

Please consult your EMS driver Owner's Manual for more information.

INSTALLING AND CONFIGURING *JORDAN IN FLIGHT*

The *Jordan In Flight* disks contain compressed files which must be installed on your hard drive before it can run. To install the program on your hard drive:

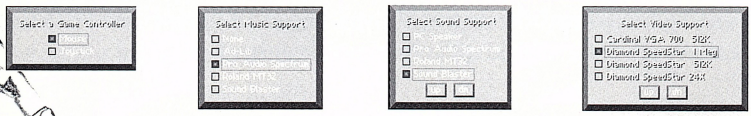
1. Insert Disk #1 into your floppy drive.
2. Switch to that drive by typing the appropriate drive letter (A: or B:) and then press Enter.

   Example: > A: [Enter}
3. Type **Install C:**, where **C:** designates your hard drive. Be sure to include the colon as part of the hard drive name.
4. When the program prompts you, replace Disk#1 with Disk#2 and press any key to continue.

5. After the installation, the program will prompt you to reinsert Disk#1. You will need to keep Disk#1 in the floppy drive while you configure the software.

The install program will create a directory called \JORDAN in the root directory of the drive you specified.

As part of the *Jordan In Flight* installation, the CONFIG.EXE program will automatically be run to let you customize the game to your equipment setup. The Config program will ask you to specify mouse/joystick, sound card, and video card. The Config program creates a batch file called BB.BAT which is used to run the game.



If you change your hardware configuration, you can run the Config program again to accommodate those changes. To run the Config program:

1. Change directory to \Jordan
2. Type CONFIG and press Enter.

JOYSTICK SUPPORT

If you wish to play with a joystick, make sure you plug the joystick in before starting the program. In the event that you decide to switch joysticks, make sure you exit the program and return to the DOS prompt before restarting the program with the new joystick.

Before you start the program, make sure the joystick handle is in the center position and that the trim controls are in their center positions. Once inside the program, use the trim controls to make slight adjustments as necessary. If you find that a trim control adjustment will not move the cursor to a particular area of the screen, simply exit the program to the DOS prompt, adjust the appropriate trim control slightly in the direction opposite to the area not reached by the cursor, and then restart the program. Make sure the trim control adjustment is very slight.

Example: If you find that the cursor will not reach the extreme right edge of the screen, exit the program, adjust the left/right trim control slightly to the left, and then restart the program.

RUNNING *JORDAN IN FLIGHT*

The CONFIG program (described above) creates a batch file called BB.BAT.

To start *Jordan In Flight:*

1. Change directory to \JORDAN
2. Type BB and then press Enter

PERFORMANCE ISSUES:

The speed of the game can be influenced by several factors. If you experience performance problems, please consult the following guidelines:

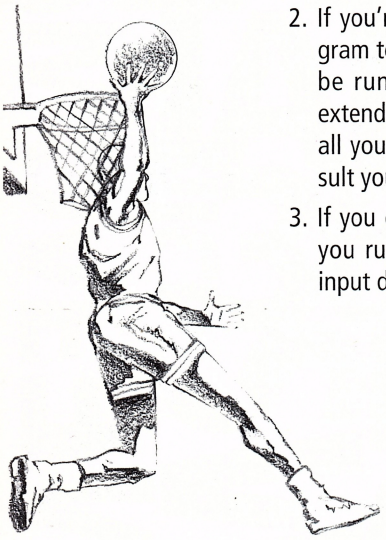
1. Run in VGA mode. The game runs significantly faster in VGA mode than in Extended VGA mode.
2. Run with Standard Screen enabled. The game runs faster on Standard Screen than on the Full Screen. The 'F' key toggles standard/full screen.
3. Use a faster video card. There is a lot of performance variability among different VGA cards. Some VGA cards (e.g. the Diamond Speed Star) may be significantly faster than the card you're using. The speed of your video card has a direct effect on game performance. This is most apparent in Extended VGA mode.
4. Make sure the game speed control is set at 100%. The '>' key increases game speed up to 100%.

POTENTIAL GRAPHICS ANOMALIES

1. Some computers may experience graphic anomalies or glitches during game play. If you experience this problem, it may be caused by a conflict between your BIOS and your EMS Page Frame. It may help to move your EMS Page Frame to a different 64K Segment. Consult your EMS driver Owner's Manual for more information.
2. The Highlight Film and Instant Replay features of the game are not supported in the 512K RAM Extended VGA drivers. Although these features are not disabled, users may experience graphics anomalies on those two screens.

TROUBLESHOOTING

1. Make sure you have enough available conventional and expanded memory. *Jordan In Flight* requires 560K free RAM from the lower 640K, and at least 1024K (1,048,576 bytes) free expanded memory.



2. If you're running QEMM version 6 with 2Mb of RAM and the program tells you that it can't find enough EMS to load, then you might be running in Stealth mode. Stealth mode uses some of your extended memory to run adapter ROMS, and you need to convert all your available memory over to EMS. For more information, consult your QEMM documentation.
3. If you experience problems with your joystick, we recommend that you run the Config program again (see p. 5-6) and change your input device to mouse.

COMMAND SUMMARY

MOUSE USERS

Left button on offense: Passes to teammate/requests pass from teammate

Left button on defense: Attempts to steal the ball

Right button on offense: Shoots the ball

Right button on defense: Jumps to block shot or rebound

JOYSTICK USERS—Button 1 is found atop the joystick handle and/or on the left side of the joystick. Button 2 is found on the right side of the joystick.

Note: Some joysticks may vary.

Button 1 on offense: Passes to teammate/requests pass from teammate

Button 1 on defense: Attempts to steal the ball

Button 2 on offense: Shoots the ball

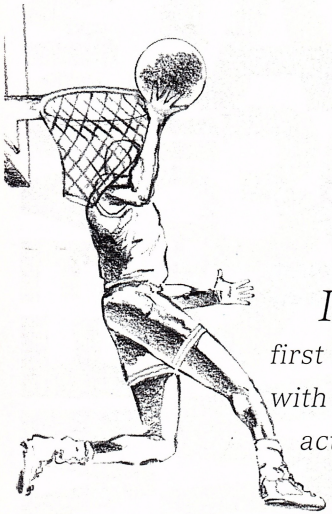
Button 2 on defense: Jumps to block shot or rebound

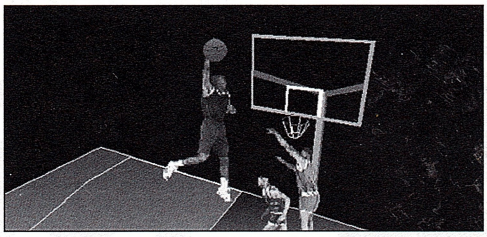
KEYBOARD COMMANDS

A	Moves camera away
B	Goes to bench
C	Moves camera closer
F	Toggles between full and standard screens
H	Calls up the hot keys menu
J	Toggles Jordon pop-ups on/off
P	Pauses/Unpauses game
R	Access replay screen
T	Toggles tracking on/off
+	Moves camera up
-	Moves camera down
<	Slows game down
>	Speeds game up
Enter	Moves to next screen (DONE)
1/F1	Calls play #1 on offense
2/F2	Calls play #2 on offense
3/F3	Calls play #3 on offense
4/F4	Calls play #4 on offense
Esc	Quits game to Main Menu/from Main Menu, exits to DOS

Note: Keys 1-4 control the camera angles if you choose not to join the action.

CAPTURING JORDAN IN FLIGHT





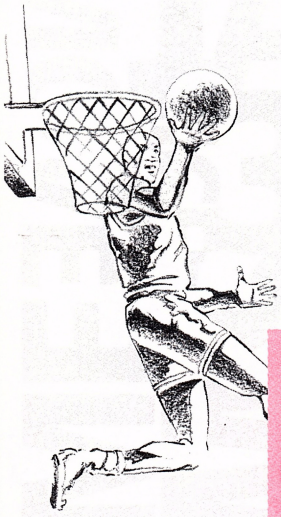
It's been a few years now since Michael Jordan first lit up home computer screens around the world with "Jordan vs Bird." And after all the wild 1-on-1 action and acrobatic dunking in that game, we knew the next one would have to be something special. Since then Michael has been busy breaking records and winning NBA Championships. We've been busy too, creating new ways to make your increasingly powerful PC increasingly more fun.

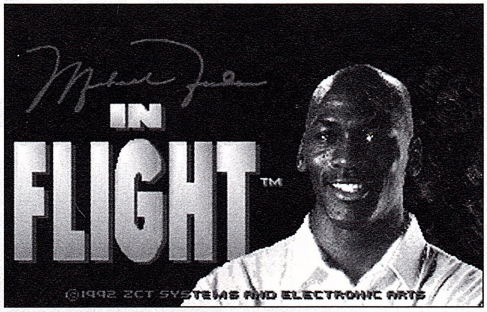
From the beginning, our challenge was not just to get the most out of the PC, but to re-create Jordan's particular basketball genius. As it turned out, we needed to develop a new technology in order to fully capture Michael Jordan's aerial agility. We wanted to offer computer gamers the dizzying thrill of a towering slam dunk, and the frenzied rush of traffic down on the hardwood. Easier said than done. It has taken a long time and great deal of ingenuity on the part of a dedicated team of technicians (all Michael Jordan fans), as well as much-needed instruction on the dynamics of basketball from Jordan himself, to offer you the opportunity to jam in the face of a 7 footer.

It should come as no surprise to hear that Michael grew up playing pick-up ball on the blacktops of Wilmington, North Carolina, where he was raised by his devoted parents. When it came time for him to enter college, it seemed fitting that he enroll at the University of North Carolina, not only for its first-rate basketball program, but for the quality education it promised and the campus's close proximity to his home. Jordan's athletic awards and accolades in college, and later in the pros, are too numerous to mention, but all his fame and fortune have not dampened his appetite for pick-up basketball—particularly for the 3-on-3 game. A self-described gym rat, Jordan even sponsors his own basketball camp. Remarkably, Michael Jordan owns the distinction of being one of the rare basketball players to have a clause in his pro contract allowing him to play competitive hoops in the off season, just for fun.

We chose to set Jordan in a 3-on-3, half-court game because it's the best format in which to showcase his talent. In a 3-on-3 match-up, the court is not so crowded that players get lost or hemmed in, yet there's still enough complexity for the offense to run a variety of plays. And the players who surround Jordan in the game are the types you'd find in the best pick-up games around the country—all different shapes, sizes and abilities. This is in-your-face, pick-up basketball at its highest level, and you get to be Michael Jordan.

PREPARE FOR TAKEOFF



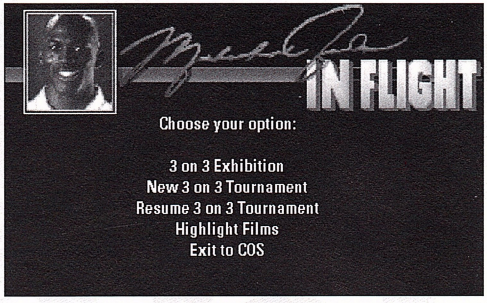


Jordan In Flight is easy to operate. The following instructions presume that you are using a mouse. If you're using a joystick, the left mouse button corresponds to Button 1 and the right mouse button corresponds to Button 2. If necessary, consult your joystick manual to locate Buttons 1 and 2. When you are instructed to move the mouse in a particular direction, simply move the joystick in that direction.

After you execute the program, the startup screen will appear, followed by the title screen.

- **Press Enter or either button to bypass the startup or title screens.**

MOVING THROUGH THE MENUS



You always start at the main menu and return to it after every game.

- **To highlight items on the menu, move the mouse up/down, or use the up/down cursor arrows or the up/down arrows on the numeric keypad.**

Note: when you wish to use the arrows on the numeric keypad, make sure the NumLock is off.

- **To select an item, press Enter or either mouse button.**

3 ON 3 EXHIBITION

SPORTS
FLIGHT
Hello everyone, and welcome to Michael Jordan's 3-On-3 Exhibition, coming to you from Chicago, Illinois. I'm your host, Ron Barr, and we've got an exciting game for you today ...
NEXT
DONE

Before every game, whether it be an exhibition or a tournament, Ron Barr in the EA SPORTS Center introduces the matchup. The NEXT button is automatically highlighted. If you do nothing, the text will scroll automatically.

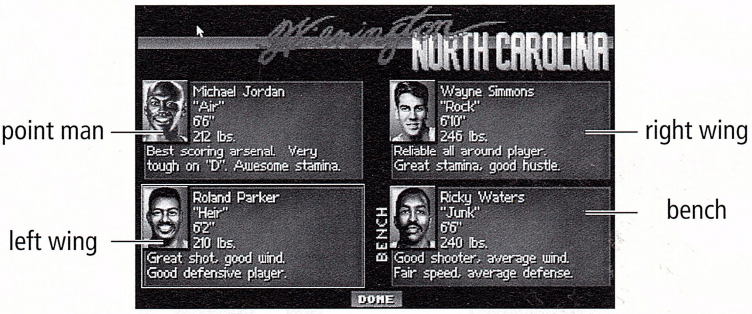
- **Press the left button or Enter to scroll through the text with the NEXT button highlighted.**

If you wish, you can bypass Ron Barr's text and go directly to the player selection screen.

- **Use the right arrow key or the mouse to highlight DONE, and then press the left button or Enter.**

CHOOSING/POSITIONING YOUR PLAYERS

After the introduction you'll see your opponent's team roster. Each team consists of four players. During a game, each team has three players on the court and one on the bench. Before the game begins you have a chance to assess the strong and weak points of the guys you're matched against. Pay particular attention to a player's size and purported talents, as these are accurately reflected in the game play. The players on the opposing team are chosen at random from the player pool.



The player in the upper left hand corner is the point man, who inbounds the ball. (O1 in the play diagrams—see pp. 21-23) The player in the upper right hand corner, already highlighted, plays the right wing (O2 in the play diagrams). The player in the lower left hand corner plays the left wing (O3 in the play diagrams). The player in the lower right hand corner rides pine. On defense, the players guard their offensive counterparts.

- **Press Enter, the left button, or Esc to proceed to the Wilmington roster.**

Michael Jordan always plays for his home team, Wilmington, North Carolina. You always control Jordan and the squad from Wilmington. Here you select Jordan's teammates. When selecting the other Wilmington players, you might want to tailor your team to suit the size and playing strengths of the upcoming opponent. There are 27 players from which to choose. Jordan plays the point man. The player in the upper right hand corner, already highlighted, plays the right wing. The player in the lower left hand corner plays the left wing.

If you remember the size, athletic attributes, and positions of your opponents, then you can select players for your team who match up to them. If you want to change a players position during a game, see Bench Swap on pp 25-26.

- **Use either set of up/down arrows to cycle forward/backward through the available players, or position the cursor over the highlighted box and Press the left button or the right button. When you find the player you want, leave his card in the window.**
- **To highlight a different box, click on it with the mouse or use the left/right arrows.**
- **When you're satisfied with your roster, press Enter or click on DONE.**

After a brief stop back at the EA SPORTS Center, the *Choose your options* screen appears.

- **Press Enter or click on DONE to go directly to the Options screen**

RULES

Below are the rules which govern play on the court.

24 SECOND CLOCK

The 24 second clock, or play clock, is reset after every change of possession or after every basket. The offensive team must shoot before the clock expires. When a player on the defensive team knocks the ball out of bounds, the offensive team retains possession and the 24 second clock is stopped but not reset.

THE BONUS CIRCLE

In a game of four periods regulated by the game clock (see Game Length on p. 16), a shot made from inside the bonus circle counts for two points and a shot made from outside the bonus circle counts for three points.

In a game of one period regulated by the score (see Game Length on p. 16), a shot from inside the bonus circle counts for one bucket and a shot made from outside the bonus circle counts for two buckets.

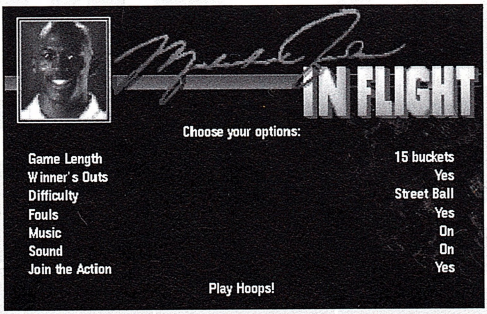
GOAL TENDING

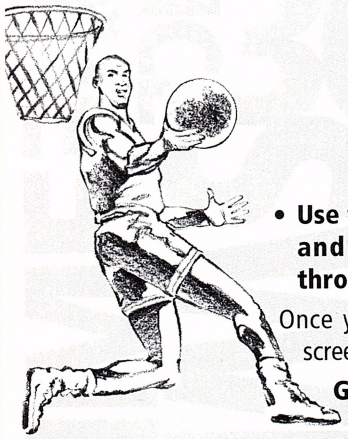
Goal Tending is called when a player blocks a shot that is on its downward arc toward the basket, or when a player touches the ball in the cylinder. If goal tending is called against you, the shooting team is awarded a basket.

CLEARING THE BALL

On a rebound, a steal, or any change of possession during play, the team with the ball must make sure that one of its players takes the ball behind the bonus line. That is called "clearing the ball." If a shot is attempted with a ball that has not been cleared, play is stopped and the ball is awarded to the other team.

OPTIONS





- **Use the mouse or the up/down arrows to highlight options, and the left button or the left/right arrows, to cycle through the choices.**

Once you change the default settings on the *Choose your options* screen, the settings remain changed until you change them back.

Game Length (default = 2 minute quarters)

Choose from one of the time lengths or bucket limits. If you choose 2, 5, 8, or 12 minute quarters, you'll play a game of four periods that ends when the game clock reaches zero. The player with the highest score at the end of the fourth period is declared the winner of the game.

If you choose 11 or 15 buckets, you'll play a game of one period that ends when one team scores the specified number of buckets.

Winner's Outs (default = No)

Those familiar with street ball know "winner's outs" means that the team which scores the bucket takes the ball out. If you'd rather that the team who didn't score the bucket take the ball out, choose No for this option.

Difficulty (default = Pro)

There are three levels of difficulty: Street Ball, College, and Pro. We advise you to start out in Street Ball and work up to Pro.

Street Ball is easiest. The opponents are not as aggressive on defense or effective on offense.

College is more difficult than Street Ball. The opposing players defend harder and score and rebound more frequently.

Pro is the toughest. You have to be on your game to score, defend, and rebound against a good Pro team.

Fouls (default = Yes)

If you trust the players on the court to call their own fouls, then set this to YES. Otherwise, it's anything goes. No fouls will be called if you choose NO. There are two basic fouls: Charging and Personal Foul.

Charging is an offensive foul. It's called when the player with the ball crashes into a defensive player who has established a defensive position.

Personal Foul is a defensive foul. It's called when a defensive player is too aggressive and hacks his opponent.

Music (default = On)

When music is ON, you will hear it while you're setting up your game and selecting rosters. Music never plays while you're on the court. To eliminate music entirely, select OFF.

Sound (default = On)

Your reasons for not wanting to hear the court sounds are your own. Maybe someone's trying to sleep, or maybe the boss is nearby. In any case, set this to NO if you want to eliminate the court sounds.

- **Press S during play to toggle sound on/off.**

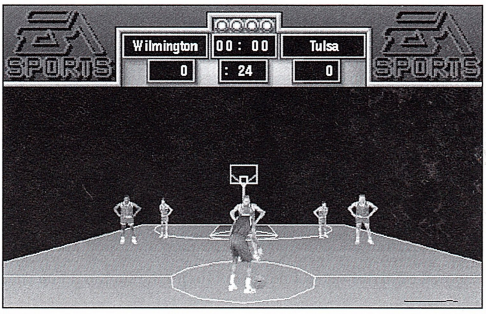
Note: You need a SoundBlaster or a Pro Audio Spectrum to hear the digitized sound effects and Jordan's voice.

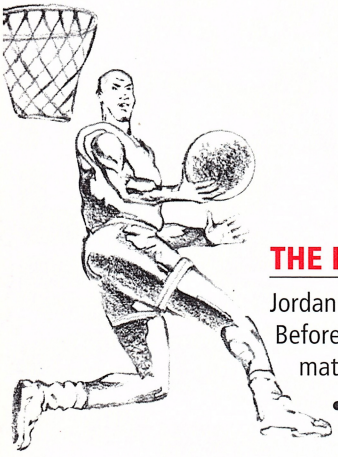
Join the Action (default = Yes)

You don't have to play if you're injured or otherwise not feeling well. Set this to NO if you'd rather sit on the sidelines and watch. This way, you can see how two teams match up without your skills. When you're not involved in the action, you can't call any of the set plays that are available to active participants. (See pp. 21-23 for more on the plays) Also, when you're just watching, you can select from the 4 different camera angles by using keys 1-4. (See pp. 32-34 for more on the 4 cameras.)

- **Press Enter to Play Hoops.**

PLAY HOOPS





THE INBOUND PASS

Jordan inbounds the ball for Wilmington at the beginning of every game. Before he can inbound the ball, he has to choose which of his teammates he wants to receive the pass.

- **Move the mouse forward/left or forward/right to direct the inbound pass.**
- **Press the left button to inbound the ball.**

When you're on defense, it's still up to you to start the action. The point man on the other team will pivot left and right. When you start the action, he will pass the ball in the direction he is facing.

- **Press the left button to have your opponent inbound the ball.**

TO TRACK OR NOT TO TRACK

When you have tracking on, you always control the player with the ball on offense, and the player closest to the ball on defense. When you have tracking off, you control Michael Jordan all the time, on both defense and offense. Whether you have tracking on or off, you always control Michael Jordan when he has the ball.

- **Press T to toggle Tracking on/off.**

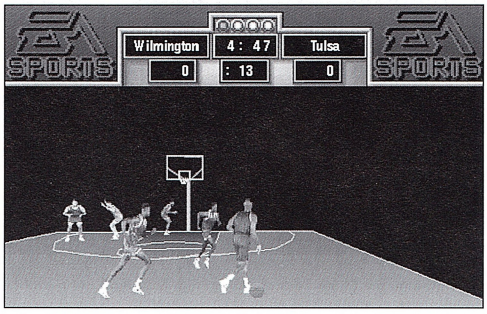
When you're on defense (or when the ball is loose) with Tracking on, you always control the defender closest to the ball.

When you're playing with Tracking off (controlling only Jordan) the other players are guided by the computer. On offense, they will pass and shoot of their own accord if you don't intervene. On defense they will cover

their men and struggle for rebounds and loose balls.

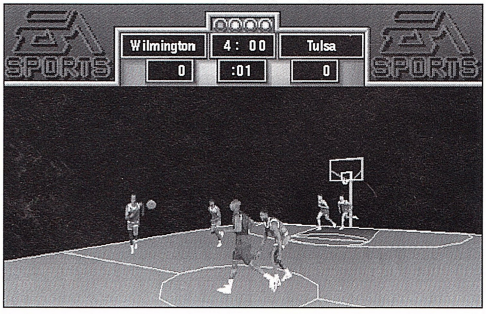
You cannot call a play with tracking on. Furthermore, if you call a play (you must have tracking off to do so) you cannot turn tracking on until the play is over.

DRIBBLING



The player with the ball always maintains his dribble until he's ready to pass or shoot. When you're in control of a player with the ball, use the mouse to direct him around the court. When another player is in front of you, you can't go through him. If you dribble right into a opposing player who is facing you, there's a chance the defender will steal the ball or that charging will be called.

PASSING



Whether you have Tracking on or off, you can always control the passing when Wilmington has the ball. Again, you don't have to be controlling a player to make him pass the ball.

With Tracking On

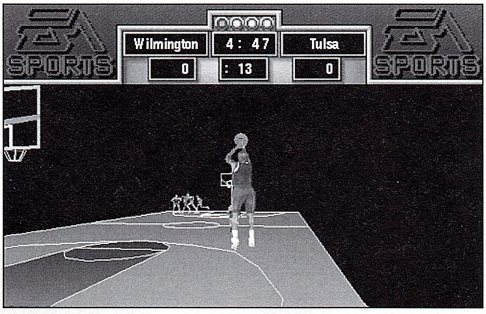
- **Press the left button to pass the ball to the teammate you're facing.**

With Tracking Off

- **Press the left button to have Jordan pass the ball to the teammate he is facing.**
- **Press the left button to request a pass to Jordan.**

Make sure there's an open lane between you and the player you're passing to. If there's an opponent between you and your nearest teammate when you press the left button, the opponent might intercept the pass.

SHOOTING



There's only one way to score, and that's by shooting the ball. The white semi-circle surrounding the blue 'key' is the bonus circle. When you're playing timed quarters, each basket made from inside the bonus circle counts for two points. A basket made from outside the bonus circle counts for three points.

When playing up to 11 or 15 buckets, the bonus circle becomes a two point line. Shots made from inside the line count for one point, while shots made from outside the line count for two points.

- **Press the right button to attempt a shot.**

REBOUNDING/SHOT BLOCKING

When a shot misses the mark it will usually bounce off the rim into the air. The opposing, computer-controlled players and your two teammates will move toward the ball automatically. You must guide the player you control toward the loose ball. If the ball is in the air above your head, it sometimes pays to jump for the rebound to keep the other guys from getting to it first.

- **Press the right button to jump for rebound or shot block.**

On defense, you can attempt to block an opponent's shot. Use the right button to jump as the opponent releases the ball. If you time it right, you can block the shot. But be careful not to swat the ball on its way downward, or you'll be called for goal tending.

STEALING THE BALL

When you're guarding an opposing player who has the ball, you might want to attempt a steal.

- **Press the left button to reach for the ball on defense.**

THE PLAYS

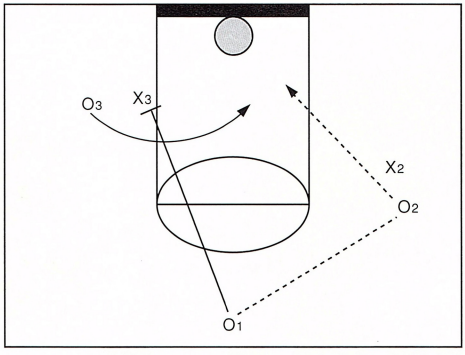
Jordan In Flight features four different offensive plays. It's best to call a play before you inbound the ball, or when Jordan has the ball at the half court circle; but you can call a play anytime you like as long as you have the ball. Also, you can call a play only when tracking is off, and once you call a play you cannot turn tracking on until the play is over.

When you call a play after inbounding the ball, the replay tape is reset, so that when you load the replay after the play is over, the play you called is isolated on the tape (See pp. 32-34 for more on Replays.)

The plays are not available when you've chosen not to join the action (see p. 17).

- **Press 1, 2, 3, or 4 to select an offensive play.**

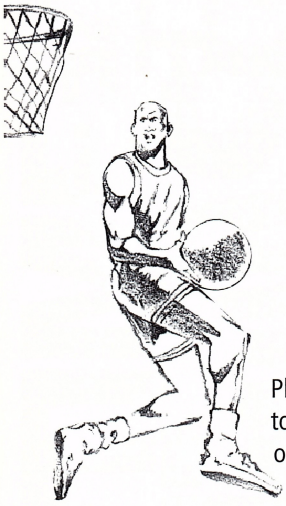
PLAY 1 (LOW POST CUTTER)

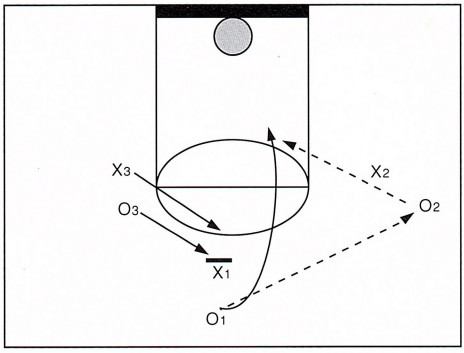


Play #1 is a standard pick away from the ball. The left wing starts out in the low post. Jordan inbounds the ball to the right wing and then runs

down to set a pick on the left wing's defender. The left wing moves across the key toward the right wing, brushing off his defender on Jordan. The right wing passes the ball to the undefended left wing, who in turn can shoot or pass.

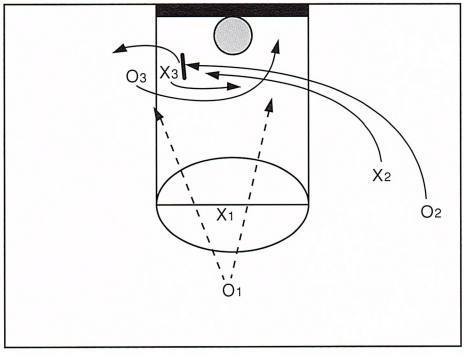
PLAY 2 (GIVE 'N GO)





Play #2 is a give'n go. When the players are in position, inbound the ball to the right wing. Immediately, the left wing comes up and sets a pick on Jordan's defender. As soon as the pick is set, have Jordan take off straight to the basket, brushing off the defender on the pick. When Jordan is in the clear, have the right wing pass the ball into him, and you should have an easy lay-up.

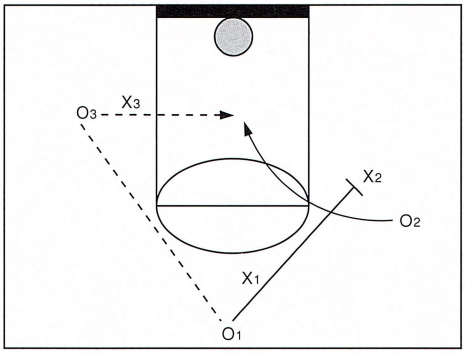
PLAY 3 (BACK DOOR SCREEN)



Play #3 is a low post back door screen. When the players are in position, pass the ball in to the right wing, then get the ball back to Jordan. The

other two players will begin their assignments. The right wing cuts across the key and sets a pick on the left wing's defender, who is positioned at the low post. The left wing cuts across the key, using the pick to brush off his defender. The right wing, who set the pick, moves away to the left low post. If the left wing is in the clear, Jordan can pass it to him for an easy lay-up. If the middle is still clogged, Jordan can pass it off to the right wing, now at the left low post.

PLAY 4 (HIGH POST CUTTER)



Play #4 is a high post cutter, which starts off looking just like the low post cutter, except here Jordan inbounds the ball to the left wing, who is positioned at the low post. Jordan then sets a screen for the right wing, who cuts to his left into the open key. As soon as the cutting right wing is in the clear, the left wing feeds him the ball for an easy lay up.

SHOOTING PERCENTAGES

Each player has his favorite areas on the court from which to pull up and pop. Obviously, most players score more consistently from close in, but it's not always easy to get open close in, especially when you're a little guy. The player descriptions on the roster screen give you some idea about the favorite scoring areas of some of the players, but in order to get a true feel for the shooting talents of each guy, you'll have to watch him in action. As in real life, players can get hot and cold, and some have certain hot spots. When you discover a player's hot spot, try to remember it so you can use it to your advantage.

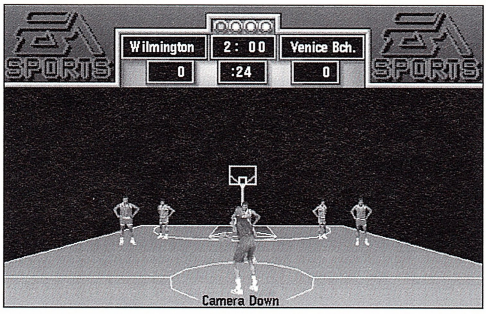
MICHAEL'S HOT KEY TIPS

There are a variety of things you can do while playing. A complete list of these options appears on Michael's Hot Key Tips menu.

- **Press H to bring up Michael's Hot Key Tips.**
- **Press the Spacebar to resume the game.**

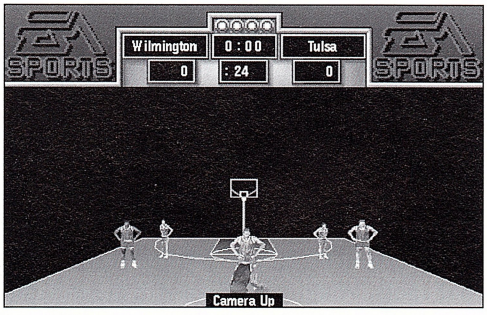
CAMERA DOWN

Note: the camera movement keys have no effect when you don't "Join the Action."



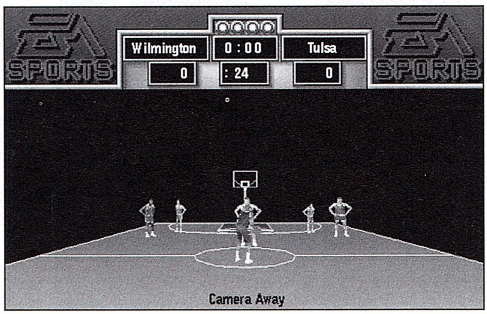
- **Press - (the hyphen/minus sign) to lower the camera.**

CAMERA UP



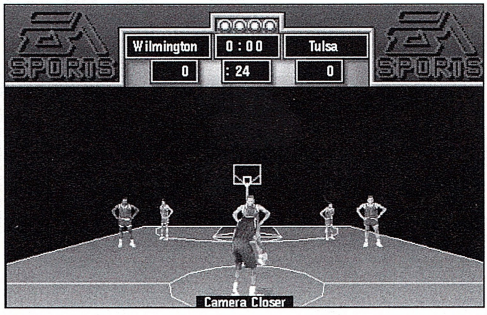
- **Press + (the plus sign) to raise the camera.**

CAMERA AWAY



- **Press A to move the camera back.**

CAMERA CLOSER



- **Press C to move the camera forward.**

GAME SLOWER

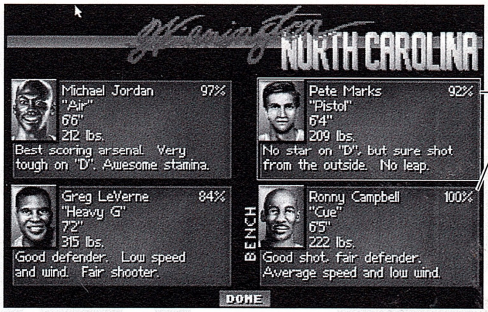
- **Press < to slow the game down.**

GAME FASTER

- **Press > to speed the game up.**

BENCH SWAP (TIME OUT)

There are two reasons why you might go to the bench: to replace a fatigued player or to switch the positions of the players already on the court for better offensive and defensive match-ups. You can call a time-out at the beginning of a possession, whether you're on defense or offense.



energy remaining

- **Press B to call a timeout.**

When you call a timeout, your opponent is also given the opportunity to make a substitution or a shift. His roster will appear first so you can see what he's done. When your opponent calls a timeout, his roster again will appear first. Take note of which players are playing at which positions and how much energy they have.

- **Press Enter to bring up the Wilmington roster.**

The Roster screen displays the four players on your team, with the one on the bench at the lower right hand corner of the screen. At the upper right hand corner of each player box appears the energy quotient of that player. All the players lose energy at different rates as they remain on the court, and they gain energy as they rest on the bench. All the players return to 100% after half-time.

No one has more stamina than Michael Jordan, and he cannot be substituted out.

Note: a fatigued player will appear listless on the court and often rest with this hands on his knees, as if trying to catch his breath.

- **Highlight the player you wish to replace using the left/right arrow keys or the mouse.**
- **Click on the player you wish to replace, or press 5 on either the keyboard or the numeric keypad.**

The highlighted player is swapped with the player on the bench.

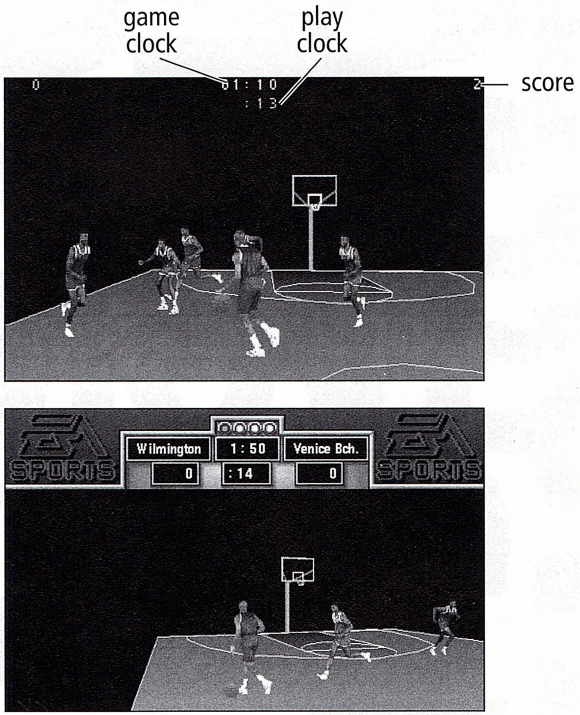
- **Press Enter or click on DONE to return to the game.**

Switching Positions—Sometimes during a timeout you might want to switch a player's position. Say, for instance, that you want to move your right wing to the left wing. Simply bench swap your right wing as described above. Your right wing is now on the bench. Then bench swap your left wing. The right wing is now playing left wing. Now, if you bench swap the right wing again, you will have effectively switched the

wings from one side of the court to the other, without having made a substitution. The player that started out on the bench will remain on the bench, and the other players will be on opposite sides of the court.

FULL/STANDARD SCREEN

You can choose between a smaller court view with an overhead scoreboard (the standard screen) or a full-screen view with the score and time clocks presented at the top of the screen. The game runs faster when you play on the standard screen.

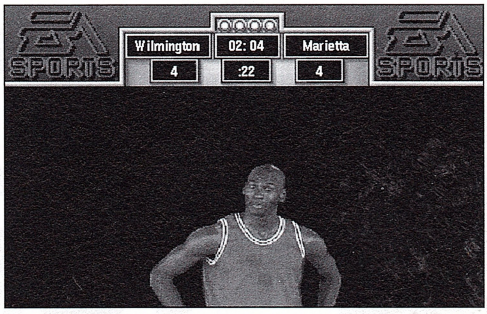


- **Press F to toggle between the Full and Standard screens.**

JORDAN VIDEO POP-UPS

Sometimes Michael will provide commentary about good and bad shots in pop-up video windows. You can turn this feature on and off as you see fit.

Note: A SoundBlaster or Pro Audio Spectrum is required to hear Michael Jordan's voice.



- Press J to toggle Jordan Video Pop-up on/off.

PAUSE ON/OFF

- Press P to pause/unpause the game.

SOUND ON/OFF

- Press S to turn sound on/off.

REPLAY

- Before the ball is inbounded press R to bring up the replay box. This allows you to view and/or save the previous play.

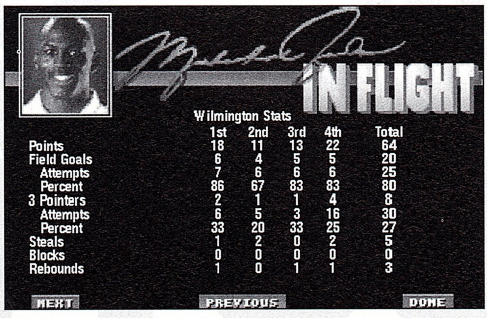
TRACKING ON/OFF

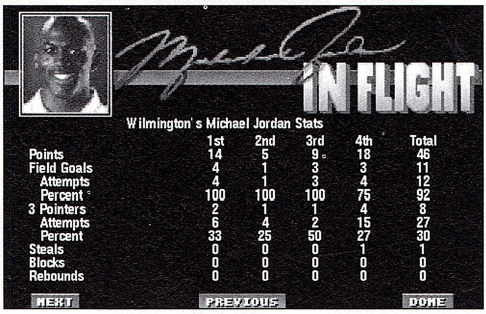
- Press T to toggle tracking on/off.

CAMERA SELECTION

- Press keys 1,2,3 or 4 to switch camera angles when you've not joined the action.

STATISTICS

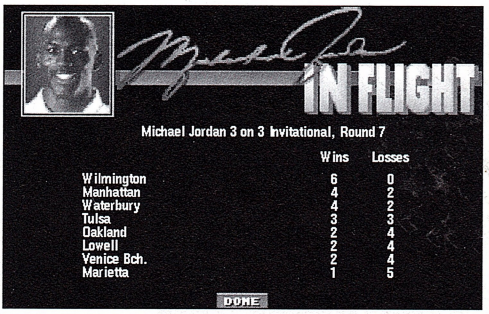

IN FLIGHT
Wilmington Stats
1st 2nd 3rd 4th Total
Points 18 11 13 22 64
Field Goals 6 4 5 5 20
Attempts 7 6 6 6 25
Percent 86 67 83 83 80
3 Pointers 2 1 1 4 8
Attempts 6 5 3 16 30
Percent 33 20 33 25 27
Steals 1 2 0 2 5
Blocks 0 0 0 0 0
Rebounds 1 0 1 1 3
NEXT
PREVIOUS
DONE


IN FLIGHT
Wilmington's Michael Jordan Stats
1st 2nd 3rd 4th Total
Points 14 5 9 18 46
Field Goals 4 1 3 3 11
Attempts 4 1 3 4 12
Percent 100 100 100 75 92
3 Pointers 2 1 1 4 8
Attempts 6 4 2 15 27
Percent 33 25 50 27 30
Steals 0 0 0 1 1
Blocks 0 0 0 0 0
Rebounds 0 0 0 0 0
NEXT
PREVIOUS
DONE

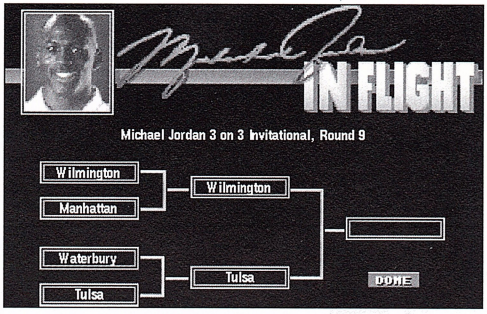
At halftime and at the end of every game you return to the EA SPORTS Center to check the team and individual statistics. Wilmington's team statistics appear first, then Wilmington's individual statistics, followed by the opponent's team and individual stats.

- **Click on NEXT to advance through the statistics screens.**
- **Click on PREVIOUS to return to a previous statistics screen.**
- **Click on DONE to continue.**

3-ON-3 TOURNAMENT



The tournament mode offers you the chance to test your skills against all the teams in the league to find out who is best. In the first seven rounds you play all the teams in the league and compile a win/loss record. While you're playing your games, the other teams are playing each other elsewhere. After all the teams have played each other, the four teams with the best records enter a single elimination tournament tree, with the team owning the best record matched up against the team with the fourth best record.



NEW 3-ON-3 TOURNAMENT

When you select *New 3-on-3 Tournament,* the program will start you at the first round of a new tournament. You can play through the entire tournament in one sitting if you like, or you can save the tournament at the end of any game. If you exit a tournament game before it is over, the partially played game will not be saved.

Before the start of the second round, the program will ask you to name the new tournament. The name can be eight characters long.

- **Type in the name of the tournament in the box provided or click on the name of an already-saved tournament.**
- **Press Enter to continue.**

If you select the name of an already-saved tournament, the already-saved tournament will be overwritten.

RESUME 3-ON-3 TOURNAMENT

When you want to resume a saved tournament, select *Resume 3-On-3 Tournament* from the Main Menu. A box containing all the saved tournaments appears on the screen.

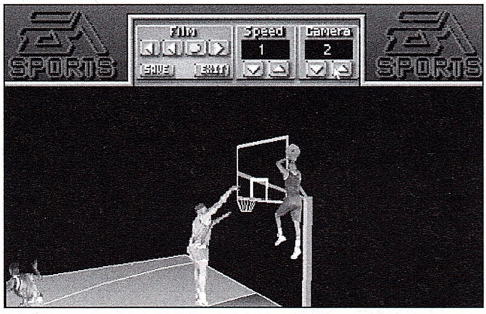
- **Click on the tournament you wish to resume, or type the name in the box provided.**
- **Press Enter to continue.**

DELETE SAVED TOURNAMENT

To delete a saved tournament, go to the /JORDAN directory in DOS and delete the file with the corresponding tournament name and the extension .TNM.

REPLAY FILM

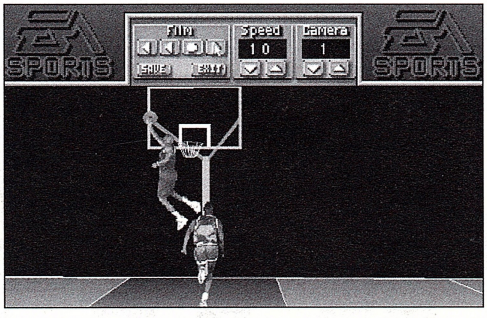
Any time the game clock is stopped and the ball is brought back to the half-court circle to be inbounded, you may view a recording of the previous play. If you inbound the ball without saving the previous play, it will be overwritten by the new play. If, after you inbound the ball, you call one of the four set plays, the tape will be reset and begin recording from the moment the set play was called.



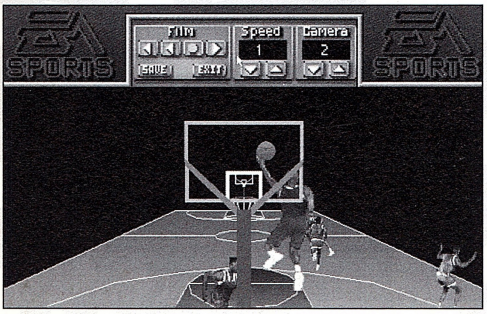
- **Press R at the end of a play (before the ball is inbounded again) to view the replay.**

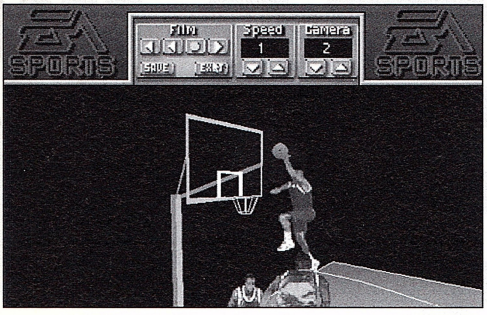
There are four different cameras from which you can view the replay film. Click on the up/down arrows located beneath the Camera box to select the desired camera.

Camera 1 is the live action camera, which faces the hoop and follows the ball from when it's inbounded to when the basket is scored or the ball goes out of bounds. Essentially, this is a replay of the action as it appeared live on the court.



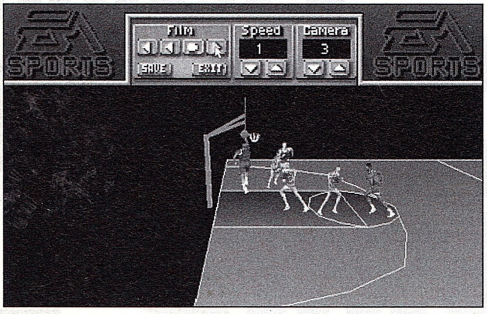
Camera 2 is located behind the backboard, but you can reposition it to anywhere on the horizontal plane. Experimenting with camera 2 can result in some pretty interesting effects.



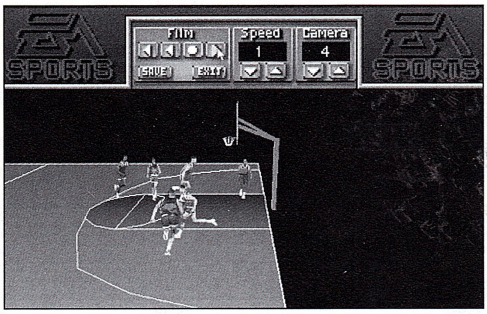


- **Press and hold both mouse buttons as you move the mouse to position the camera anywhere on the court.**

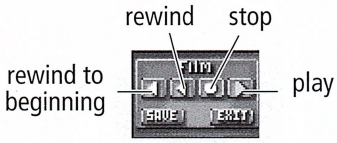
Camera 3 is located on the left side of the court and is best for viewing great plays that happened on that side.



Camera 4 is located on the right side of the court and is best for viewing great plays that happened on that side.



The VCR-style control box allows you to play, stop, and rewind your film.



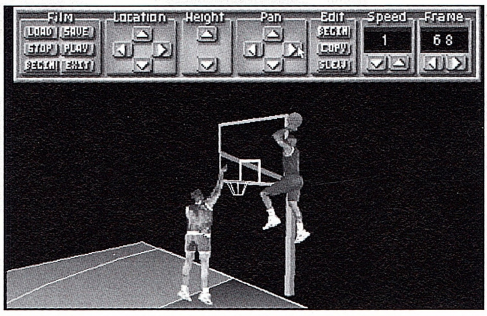
- **Click on the arrow to the right of the dot to start the film.**
- **Click on the dot to stop the film.**
- **Click on the arrow to the immediate left of the dot to rewind the film.**
- **Click on the arrow to the far left of the dot to return the film to the beginning.**

You can regulate the speed of the replay using the speed box. The maximum speed is 10, the minimum 1. Click on the up/down arrows underneath the Speed box to select the desired speed.

If you wish to save the film so you can edit it in the Video Edit Lab, click on the SAVE button in the Film box. A window with a flashing cursor appears at the center of the screen. Type in a name of up to eight characters, and then press Enter.

Press EXIT to return to the game.

VIDEO EDIT LAB



At the end of a game you can bring up the Video Edit Lab from the Main Menu.

- **Select Highlight films from the Main Menu to bring up the Video Edit Lab.**

- **Type in the name of the film you wish to view, and then press Enter.**

The Video Edit Lab allows you to position the camera to a virtually unlimited number of positions throughout the highlight. To appreciate the full scope of the Video Edit Lab, consider this: if your highlight film has a hundred frames, you could, if you wanted to, create a hundred different camera angles (one for each frame); but the resulting replay would probably make you dizzy.

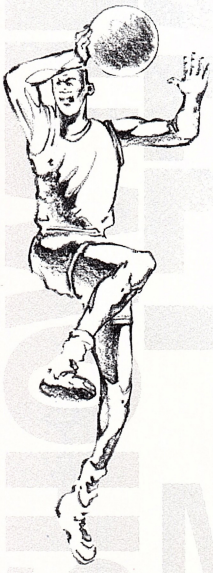
FILM BOX

The film box is the main control panel in the Video Edit Lab. It's here that you can load any of the saved films, save the edits to a film, stop a film from rolling, play back a film, return to the beginning of a film, and exit the lab.

- **To bring up the highlight film menu, click on LOAD.**
- **To save changes to a highlight film, click on SAVE.**
- **To stop the film from rolling, click on STOP.**
- **For a replay, click on PLAY.**
- **To return to the beginning of the film you're viewing, click on BEGIN.**
- **To exit the lab, click on EXIT.**

LOCATION

The Location box allows you to position the camera anywhere along the horizontal plane at the present height of the camera. If the arrows on the box represent a compass, the north arrow moves the camera forward, the south arrow moves the camera backward, the east arrow moves the camera to the right, and the west arrow moves the camera to the left.



- **Click on the arrows in the Location box to change the location of the camera.**

HEIGHT

The height box allows you to raise and lower the camera along the vertical plane. The 'north' arrow raises the camera, and the 'south' arrow lowers it.

- **Click on the arrows in the Height box to adjust the height of the camera.**

PAN

The Pan control box allows you to swivel the camera's turret. The 'north' arrow tilts the camera up, the 'south' arrow tilts the camera down, the 'east' arrow swings the camera to the right, and the 'west' arrow swings the camera to the left.

- **Click on the arrows in the Pan box to pan the camera.**

EDIT BOX

You need the edit box to modify the films you save. The Begin button tells the Video Edit Lab that you want to change camera angles beginning at the frame that appears on the screen. The Copy button tells the lab that you want to copy the changes you made after you pressed the Begin button. (See p. 38 for the walk through) The Slew button instructs the lab to move the camera slowly from one position to another. (See p. 39 for more on Slew)

SPEED BOX

The speed box tells the lab how fast or slow to run the film. 10 is fastest. 1 is slowest.

- **Click on the arrows in the Speed box to adjust the film speed.**

FRAME BOX

When you're ready to create a new camera angle, go to the frame where you wish the camera angle to change.

- **Use the arrow on the frame box to advance the film to the frame where you'd like to create a new camera angle.**
- **Press the left button to advance one frame at a time.**
- **Press and hold both buttons to advance the frames rapidly.**

Below is a detailed walk through of the video editing process.

SAMPLE REPLAY: A WALK THROUGH

The following section presents the two sample replays that came with *Jordan In Flight*. The first one, SAMPLE, shows a replay in its original, unedited form. The second, SAMPLE1, shows the same replay already edited. If you follow the instructions below with SAMPLE you should see how SAMPLE1 was created. You might want to watch both replays before you try to create your own using the instructions below.

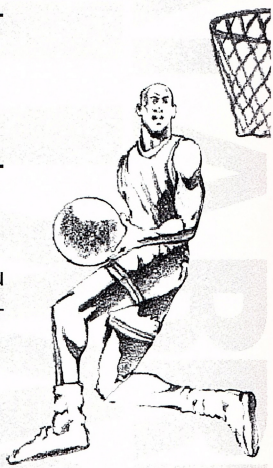
1. Click on SAMPLE and then press Enter.
2. Move the camera to the desired angle.
3. Click on BEGIN in the Edit box.
4. Advance to frame 14. (Note: the camera will return to the default view.)
5. Click on COPY in the Edit box. (The camera returns to the modified view.)
6. Move camera to desired angle.
7. Click on BEGIN in the Edit box.
8. Advance to frame 30.
9. Click on COPY in the Edit box.
10. Move camera to desired angle.
11. Click on BEGIN in the Edit box.
12. Advance to frame 100.
13. Click on COPY in the Edit box.
14. Move camera to desired angle.
15. Click on BEGIN in the Edit box.
16. Advance to frame 119.
17. Click on COPY in the Edit box.
18. Move camera to desired angle.
19. Click on BEGIN in the Edit box.
20. Advance to frame 134.
21. Click on COPY in the Edit box.
22. Click on BEGIN in the Film box.
23. Click on PLAY in the Film box. (Note that you can view the film at different speeds.)
24. Click on SAVE in the Film box.
25. Type in a new name in the saved replays box.
26. Press Enter.

SLEWING THE VIEW

The slew feature allows you to gradually move from one camera angle to another, as though the camera were slowly floating to a new position. You can slew the camera for the entire replay, or any portion of it.

- **Use the arrows in the Frame box to select the frame where you want the slewing to begin.**
- **Orient the camera to the angle at which you want the slewing to begin.**
- **Click on BEGIN.**
- **Select the frame where you wish the slewing to end.**
- **Orient the camera to the angle at which you want the slewing to end.**
- **Click on SLEW.**

When you replay the film, the camera will slew from the frame you selected before clicking on BEGIN to the frame you selected before clicking on SLEW.



3-ON-3 IN AMERICA

Photo by T.S. Flanagan

Hardly computer geeks, these boys from EA take their lunch hour on the court at Shell Park in Foster City.

While basketball is played in every environment all over the world, it is still a characteristically inner-city American sport. In every U.S. city you can find outdoor, public courts; and where you find a court you'll find a pick-up game. Indeed, the whole pick-up game culture is so wide-spread in America that the best amateurs have recently begun to compete in televised events sponsored by corporate interests.

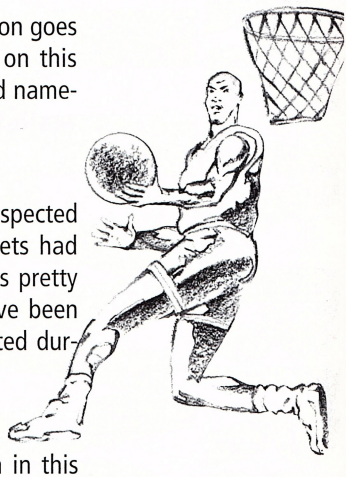
The culture of pick-up basketball doesn't end there. Distinct changes in the college and pro game over the past twenty years show the undeniable influence of the pick-up game. Whereas pro and college programs of the early seventies and before stressed a methodical approach to both offense and defense, by the time the eighties rolled around, players were running and gunning and taunting each other with their in-your-face style of play.

Of all the different pick-up game formats, three-on-three is probably the most widespread. The ideal half-court match-up, three-on-three basketball offers a harmonious balance between the individual and the team. During play, the court is not so crowded as to cause the kind of confusion often present in five-on-five pick-up games, yet there are enough players to run plays that incorporate screens, criss-crosses, and give-and-goes. And the positions of guard and forward begin to take on definition in three-on-three, since the big players now have the luxury of staying down low to crash the boards and receive passes, and the smaller, quicker players can focus on popping from the outside, or dishing it inside.

Jordan In Flight features imaginary teams from some of the best three-on-three hot spots in America. Over the years, these cities have shown themselves to be spawning grounds for some of the best pick-up basketball in the world. Below are descriptions of some of the courts and practices in these meccas of the pick-up basketball culture.

Wilmington, North Carolina

Once home to Michael Jordan, some of the best 3-on-3 hoop action goes down at Martin Luther King Center. It's a pretty rough game on this urban concrete, and the pacifist tenants of the Center's esteemed namesake don't always apply on the court.



Manhattan, New York

Of the dozens of legendary Manhattan courts, one of the most respected is Holcombe Rucker Playground. When last we checked, the nets had been stolen, but the rims were still straight. Holcombe Rucker is pretty rough, but other courts in the area are rougher. Policemen have been known to arrest certain players for aggravated assaults committed during games on some of the tougher courts.

Oakland, California

The Bushrod Recreation Center sports some of the best action in this basketball town. Like most places, it's winner's outs and win by two, and the competition is at the college level and a lot more physical. No gender discrimination here, as women are welcome to get in on the rough stuff.

Lowell, Massachusetts

The South Common of the Bishop Markham Housing Project is the site of some of the roughest but crispest basketball in the Northeast. The urban outdoor setting draws premier high-school players from all over. If you find yourself in the neighborhood, stop by and see if you can hang; just don't say you're from Chelsea.

Waterbury, Connecticut

One of the premier spots in the country for pick up ball is the Pearl Street Community Center. Both college and pro players are known to stop by the Center to hoop it up with some of the baddest basketballers around. This urban garden is equipped with good quality rims and nets, an outdoor lighting system, refreshments, and two full courts. The standard 3-on-3 rules apply, and no one cares what kind of contract you've got in your back pocket. The local unknowns are likely to face any out of town stars brave enough to show.

Venice Beach, California

The Boardwalk in Venice Beach, California is probably the most colorful site for pick up basketball in the country. It's no wonder that Hollywood chose it as the home of the scammers in the acclaimed film, *White Men Can't Jump.* In addition to great weather year round, the Beach Courts are surrounded by scantily clad bathers, body builders, and social misfits of every description. Lest the carnival-like atmosphere fool you, the hoops here is as good as it gets in the greater Los Angeles area, except perhaps for the Fabulous Forum and the L.A. Sports Arena.

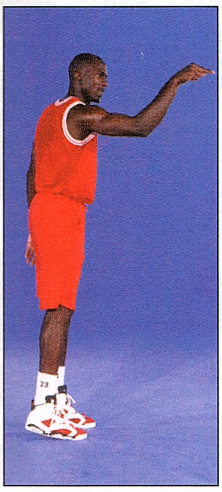
Marietta, Georgia

The best pick-up ball in the Atlanta area is found in Marietta, particularly at the Lawrence Recreation Center. The level of play here sometimes rivals the pro game, though the stakes aren't nearly as high. Still, the hoopsters here can really take the rock to the hole, and you better make sure you've lost at least a pint of blood before you call a foul.

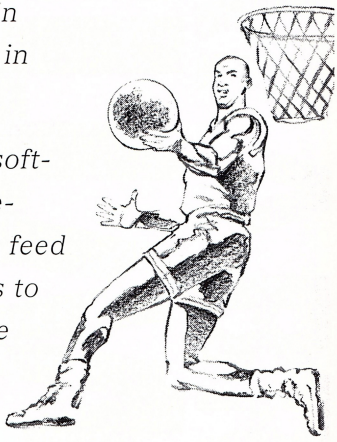
Tulsa, Oklahoma

Tulsa is not exactly a mecca for pick-up basketball, but if you search you might find a game worth lacing up your high-tops for. Over at the Turner Recreation Center there's a game, but the boys there spend as much time arguing about fouls as they do playing ball. When the chairs started flying, we backed out the door quietly. Incidentally, the programming team for *Jordan In Flight* resides in Tulsa. Imagine that!

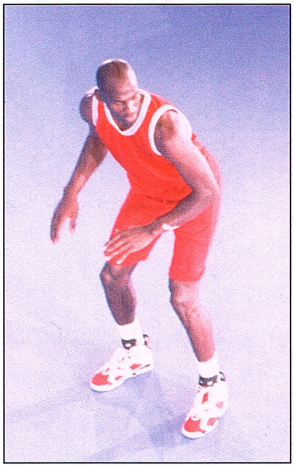
THE MAKING OF JORDAN IN FLIGHT



If basketball were a science, Michael Jordan would be considered a technological breakthrough. So it's fitting that we showcase Jordan in this ground-breaking innovation in computerized sports simulations.



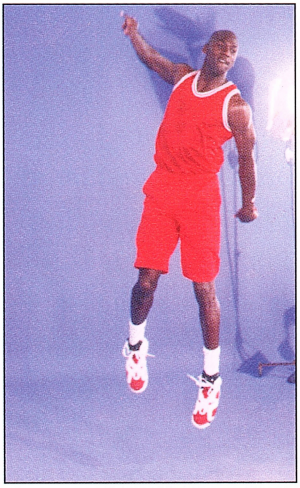
Advances in entertainment software typically are slow and incremental. Programmers and artists feed on each other's accomplishments to make subsequent products a little smoother, a little faster, a little more vivid, etc. Memory constraints and other limitations often make it necessary for game designers to compromise their visions. Seldom does someone come up with something totally new.



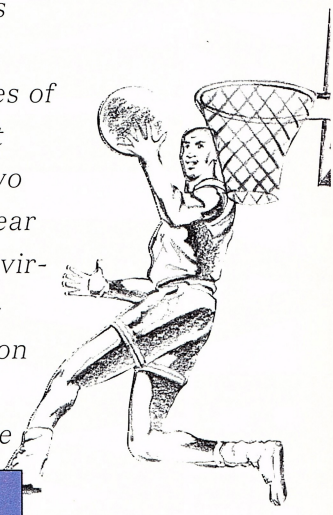
But Mike Suarez of Pacific Gameworks and Greg Zumwalt of ZCT Systems Group broke through the barrier of "improvement by inches"; they jumped a mile by developing the first truly three-dimensional sports simulation. Their new software combines advanced flight simulation technology and digitized video imaging. What we have here is a basketball game where you control video images of Michael Jordan and other real athletes, performing actual moves—jump

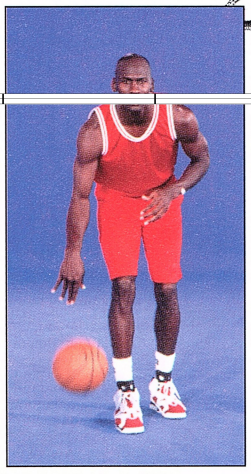
shots, dunks, blocks, etc—on a 3-D court, from an almost infinite variety of views.

Here's how they did it. Mike Suarez and Don Traeger (Executive Producer, Electronic Arts) videotaped Jordan performing his signature moves against a chroma-key blue background. Every movement depicted in the game had to be shot from eight different angles without the ball—Jordan running, Jordan dribbling and passing, Jordan defending, Jordan shooting and, of course, Jordan jamming. The blue screen allows selected images to be removed cleanly from the videotape, digitized, and inserted into the game's 3-D basketball court, where flight simulation algorithms are applied. These algorithms let the player view the game from any distance and any angle. And you can pause the game and replay a sequence from a different angle. It's like controlling a professional basketball game from the TV director's booth, only better.



The credit for this new technology goes to Greg Zumwalt. In the face of skepticism, Zumwalt developed an animation technique that scales and compresses digital images correctly and proportionally in real time. He believed that if he captured enough frames of basketball players in motion from enough different angles, his original code could manipulate these two dimensional digital images so that they would appear as 3-D players on the court. And he was right; the virtually infinite variety of views created by this technique allows you to see the action from anywhere on or above the court, in such a way that you feel like you're part of the game. This not only enhances the playability factor, but it allows for some astonishing replay views. Television replays are limited to a few cameras, but this computer program allows you to invent your own camera angles after a play is over, so that when Jordan does a 360° reverse double-pump jam, you can see it again and again from as many different angles as you like.





To round out the field of players, former stars from colleges in the San Francisco and Chicago areas were videotaped just as Jordan was, and their images digitized and sent to Zumwalt. In all, the making of Jordan Flight has cost hundreds of man hours and hundreds of thousands of dollars, and this is just the beginning.

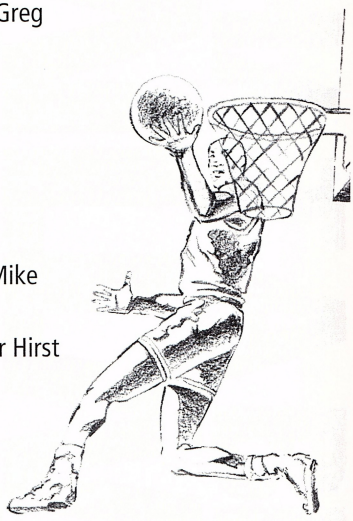
ABOUT THE ARTISTS

Mike Suarez is the president of Pacific Gameworks, a San Francisco-based entertainment software company. When cornered, Mike will confess to being better with a joystick than a roundball. When I'm playing *Jordan In Flight*, I can really take the rock to the rack; but in High School we lost more often than the team that always gets spanked by the Harlem Globe Trotters. . ." Mike and his partner, Bret Hamilton can now be found running through Golden Gate Park dressed in Gladiator Costumes, fighting giant rubber monsters and publisher skepticism in an ongoing quest to publish their next product.

Greg Zumwalt is president of ZCT Systems Group, a hardware and software engineering company in Tulsa, Oklahoma. Greg has been designing software for 20 years, creating successful entertainment products, commercial flight simulators, motion control systems and top-secret government projects that he can't tell us about without having to kill us afterwards. When not pushing at the seams of the program envelope, Greg likes to hit the golf links and work on his impressive handicap. Whether he likes it or not, his 3-D engine has more control over the laws of physics than he does with a golf club in his hands.

CREDITS

Design:	Mike Suarez of Pacific Gameworks, Greg Zumwalt of ZCT Systems Group, and Michael Jordan
Programming:	ZCT Systems Group
Executive Producer:	Don Traeger
Producer:	Jim Rushing
Assistant Producer:	Scott Gilliland
Graphic Art:	Cynthia Hamilton, Margaret Foley, Mike Suarez, Sheryl Zumwalt
Music and Sound Effects:	Kris Hatlelid, Edwin Dolynski, Alistair Hirst
Sound Technology:	Kris Hatlelid, Brian Plank
Technical Director:	Richard Hicks
Video Production:	Mark Day
Video Editing:	Pete Nehl and Guerdon Trueblood of Varitelvideo, San Francisco
AI Design Assistance:	Wayne Townsand
Testing Manager:	Randy Delucchi
Testing:	Kevin Hogan
Product Manager:	Gary Gettys
Package Design:	E.J. Sarraille
Package Photography:	Richard Corman, Henrik Kam
Package Direction:	Nancy Fong
Documentation:	T.S. Flanagan
Manual Layout:	Gin Brothers
Manual Animation:	Mitchell Anthony
Quality Assurance:	Rob Cavaness, Michael Yasko



PROBLEMS WITH THE GAME?

If you are having a problem installing or playing the game, we want to help.

First, please make sure you have read the installation and start-up section of your manual thoroughly, and make sure you have at least 3.5 megabytes free on your hard disk. If you have followed the directions in the documentation, and are still having trouble installing or operating the software, here are some hints that might help solve the problem. Before attempting any of the following suggestions, please make sure you are familiar with the DOS commands being used. Consult your DOS manual for more information.

WESTERN DIGITAL AND PARADISE GRAPHICS CARDS

Jordan In Flight does not support Paradise or Western Digital cards in Extended VGA mode. However, if you own one of theses cards it may be possible to run the game in Extended VGA mode using one of the drivers we have supplied.

In order to try this you will need to edit the BB.BAT file in the \JORDAN directory and add a parameter to the command line. Consult your DOS manual for information on editing files.

The parameter that needs to be added is:

-d=name of driver (no spaces)

For Paradise users, the name of the drivers are:

WDI512K.DRV for 512K cards

WDI1MEG.DRV for 1MB cards

For Western Digital users, the names of the drivers are:

WD512K.DRV for 512K cards

WD1MEG.DRV for 1MB cards

If you have previously selected an Extended VGA card in the Config program, you will see that a -d parameter already exists. Simply change the driver name to the appropriate above listed drivers.

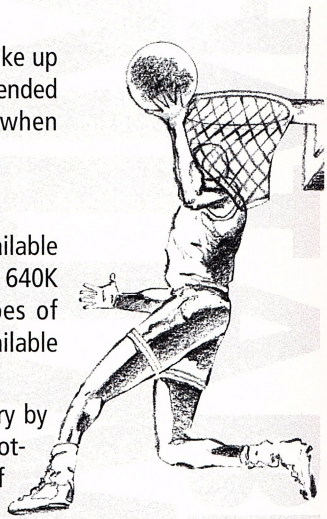
If you have not previously selected an Extended VGA card, there will not be a -d entry in this file. Add the **-d=name of driver** parameter to the line that starts **bbexe**.

TSRS/DEVICE DRIVERS/DOS SHELLS

TSR stands for Terminate Stay Resident. A TSR is a program, like SideKick®, that automatically executes itself when you start up your com-

puter from a hard drive. They are generally installed in your *autoexec.bat* file. Device Drivers and DOS shells also are loaded automatically. They are usually installed in your *config.sys* file.

These TSRs or Device drivers sometimes interfere with games, or take up valuable memory the game may need, and it is generally recommended that you not run any such programs, device drivers, or shells when attempting to install or play a game.



CHECKING THE AMOUNT OF AVAILABLE MEMORY

Many problems are caused by the machine not having enough available Conventional (Base) Memory. Although almost all machines have 640K of Conventional Memory, TSRs, Device Drivers, and other types of Memory Resident programs will take away from the amount of available base memory.

MS DOS 5.0 users can check the amount of available base memory by typing "MEM/C" and then pressing the ENTER key. Towards the bottom of the screen, the number in parenthesis to the right of "Largest Executable Program Size:" is the amount of available base memory. If you want to see which drivers are loaded into Conventional Memory and there is too much information to view on the screen at once, type "MEM/C MORE" to view your computers memory information one screen at a time. Press any key to view the next screen.

NOTE: On certain machines you may only be able to access the MEM command from within the DOS directory. On these machines, type "C:\DOS\MEM /C" and then press the ENTER key to access the memory configuration.

MS DOS 3.3 users can check the amount of available base memory by typing "CHKDSK," which stands for Check Disk, and pressing ENTER. The last set of numbers, "Bytes Free" is the amount of available base memory. Note that this number is in thousands of bytes and that 1024 bytes make up one kilobyte (K).

If this number is less than 560,000 the problems that you are experiencing are probably related to a memory conflict. You will need to remove any memory resident programs to free up additional base memory.

DOS BOOT DISK

If you are having trouble installing, experiencing unusual lockups, or other problems that do not appear normal, we suggest you try starting up your system with a DOS Boot disk. Here are the steps for creating a DOS boot disk. Please follow these steps exactly.

1. To create a DOS disk you will need a blank disk the same size as your A: drive.
2. Type **C:** and press **Enter**.
3. Place the blank disk into drive A:
4. Type **FORMAT A: /s** and press **Enter**. Note: If you are formatting low density disks on a high density drive, use the following commands:

   5.25 inch low density disk: **FORMAT A: /s /n:9 /t:40**

   3.5 inch low density disk: **FORMAT A: /s /n:9 /t:80**

You will be prompted to insert a blank disk into drive A. Do so if you haven't. Press the **Enter** key when you are ready.

5. Once the disk is finished formatting you will be asked whether you wish to format another or not. Answer **N** and press **Enter**.
6. You now have a DOS boot disk.

FREEING UP ADDITIONAL MEMORY USING THE DOS BOOT DISK

Users WITHOUT a memory manager: It is not possible to free up much more base memory without using a memory manager, which allows one to access Expanded Memory (EMS) or Extended Memory (XMS). Most memory ambitious games require Expanded Memory (EMS) while Windows usually uses Extended Memory (XMS).

Users with MS DOS 5.0: Rather than change your permanent system software configuration, you can use the Boot Disk and the EMM386 memory manager software included with MS DOS 5.0 to temporarily free up available memory.

READ THIS SECTION COMPLETELY BEFORE YOU BEGIN

To configure the Boot Disk to free up OVER 610K of available base memory and to set up Expanded Memory (EMS):

1. Back up your CONFIG.SYS and AUTOEXEC.BAT files before editing them so that you can return to the originals if you have any problems. To back up the files type "COPY C:\CONFIG.SYS C:\CONFIG.BAK" and press the ENTER key, then type "COPY C:\AUTOEXEC.BAT C:\AUTOEXEC.BAK" and press the ENTER key.
2. Copy the CONFIG.SYS and AUTOEXEC.BAT files from the root directory (C:\) on your hard drive to the root directory (A:\) on the Boot Disk that you have just created.

   Example: At the C:> prompt, type "COPY C:\CONFIG.SYS A:\" and then press the ENTER key. To copy the AUTOEXEC.BAT file, type

"COPY C:\AUTOEXEC.BAT A:\" and then press the ENTER key.

3. Open the copy of the AUTOEXEC.BAT file using the EDIT program from MS DOS 5.0:

   i. Type "CD\DOS" and then press the ENTER key.

   ii. Type "EDIT A:\AUTOEXEC.BAT" and press the ENTER key.

4. From the Boot Disk copy of the AUTOEXEC.BAT file, delete all lines, except the following:

   PROMPT PG

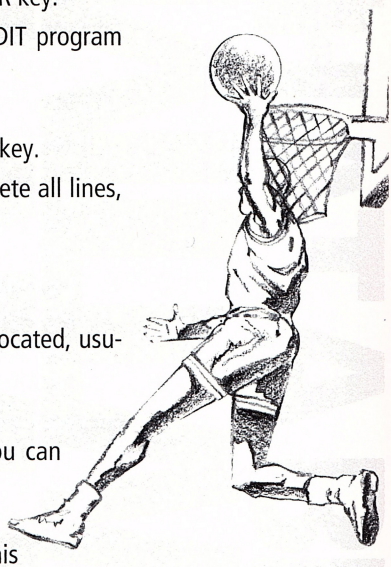
   <PATH>MOUSE.COM

   <PATH> is the directory in which your mouse driver is located, usually C:\, C:\MOUSE, C:\DOS or C:\WINDOWS.

   Example: C:\DOS\MOUSE.COM

   If you have a line that begins, "Path=C:\ ..." then you can leave it also.

   NOTE: Your mouse line may be different if you are NOT using the MOUSE.COM mouse driver. Do not change this line if it looks different. Drivers that have a .SYS extension will be loaded through the CONFIG.SYS file and you should leave that line there when you are editing that file. If you have other questions about loading your particular mouse driver, consult your mouse or DOS manuals.



5. Save the edited AUTOEXEC.BAT file and open the Boot Disk copy of the CONFIG.SYS file from within EDIT.

   To save, press Alt-F to bring down the File menu and press the "S" key.

   To open, press Alt-F, press the "O" key and then type "A:\CONFIG.SYS" and press the ENTER key.

6. While still in EDIT, delete all lines from the Boot Disk copy of the CONFIG.SYS file EXCEPT the following:

   DEVICE=C:\DOS\HIMEM.SYS

   DEVICE=C:\DOS\EMM386.EXE 1024

   DOS=HIGH,UMB

   If you do not have these lines, enter them now. If the HIMEM.SYS and memory manager file are not located in the DOS directory, replace DOS with the name of that directory in the first two lines of the above example. If you have not moved these files, then they will be located in the DOS directory and your file should look identical to the three lines above.

Note: If you are NOT using the EMM386 memory manager, consult your manufacturers manual for more information on the proper way to load the program through the CONFIG.SYS file.

7. Save the edited CONFIG.SYS file and Exit the EDIT program.

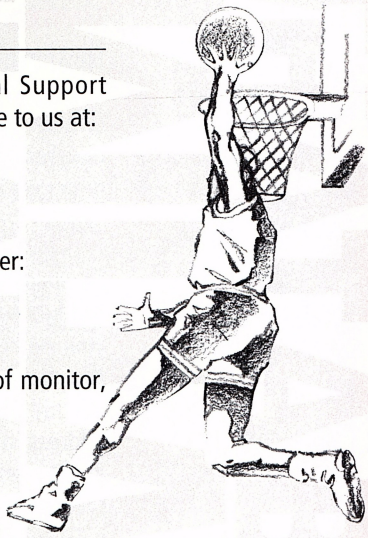
   To save, press Alt-F and then press the "S" key.

   To Exit the Edit program, press Alt-F and then press the "X" key.

8. You now have a boot disk which will free up over 610K of available-base memory and set up Expanded Memory (EMS). You can start your computer from this disk by inserting it into the A: drive and restarting your machine. Your computer will boot up to the A:> prompt. Type "C:" and then press the ENTER key to return to the hard drive.

For more information on editing your CONFIG.SYS and AUTOEXEC.BAT files, or on changing your startup configuration, consult your DOS manual.

TECHNICAL SUPPORT



If you have questions about the program, our Technical Support Department can help. If your question isn't urgent, please write to us at:

Electronic Arts Technical Support
P.O. Box 7578
San Mateo, CA 94403-7578

Please be sure to include the following information in your letter:

- Product name
- Type of computer you own
- Any additional system information (like type and make of monitor, video card, printer, modem etc.)
- Type of operating system or DOS version number
- Description of the problem you're having

If you need to talk to someone immediately, call us at (415) 572-ARTS Monday though Friday between 8:30 am and 4:30 pm, Pacific Time. Please have the above information ready when you call. This will help us answer your question in the shortest possible time.

If you live outside of the United States, you can contact one of our other offices.

In the United Kingdom, contact: Electronic Arts Limited, P.O. Box 835, Slough SL3 8XU, UK.

Phone (753) 546465.

In Australia and New Zealand, contact: Electronic Arts Pty. Limited, P.O. Box 539, Ashmore City, Queensland 4214, Australia.

Phone: (075) 911-388

LIMITED WARRANTY

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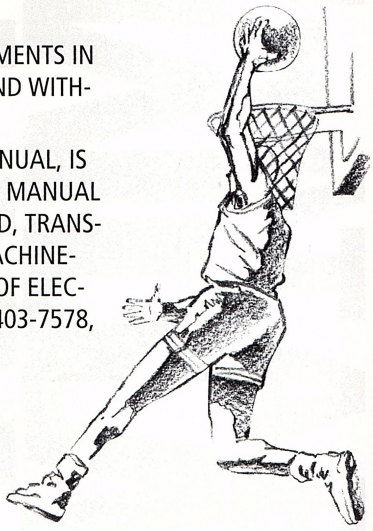

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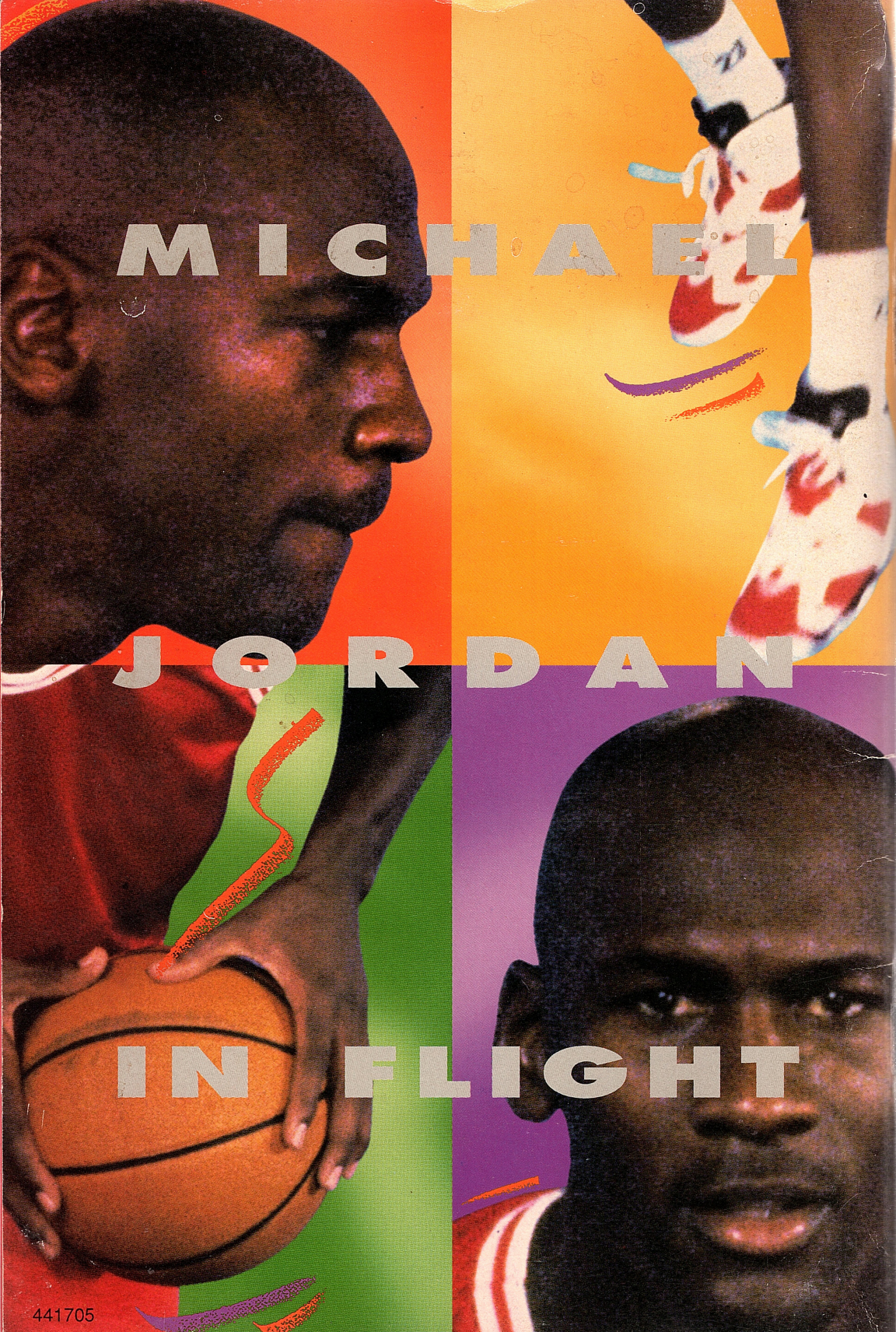

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